

CLAIMS

WHAT IS CLAIMED IS:

1. A method for viewing electronic information comprising the steps of:

displaying in a first window a physical page from an electronic document containing information from a predefined page format, wherein the electronic document comprises representations of at least one physical page, and a visual reference emphasizing information on the at least one physical page,

extracting the information emphasized by the visual reference on the at least one physical page, and

presenting the extracted information in a second window.

2. The method of claim 1 wherein the physical page is represented in an electronic page view.

3. The method of claim 1 wherein the physical page is represented as an icon including a thumbnail of the physical page.

4. The method of claim 1 wherein the first and second window are the same window.

5. The method of claim 1 wherein the second window is an enhanced interactive window including a thumbnail image of

a physical page, a graphic image of a physical page, text, free flowing text, icons, hyperlinks, menus, and control elements.

6. The method of claim 1 wherein the step of extracting information further comprises the step of selecting a markup annotation from the physical page and converting the information contained in the selected markup annotation to information for use in the second window.

7. The method of claim 6 wherein the step of selecting further comprises the step of enclosing the markup annotation with a box.

8. The method of claim 1 wherein the second window may be placed in various positions relative to the first window, including on top of the first window, adjacent to the first window, and partially covering the first window.

9. The method of claim 1 wherein the second window further comprises a control panel for managing the extracted information.

10. The method of claim 1 wherein the extracted information may be viewed simultaneously in a multiple of enhanced interactive windows.

11. The method of claim 1 wherein the visual reference on the physical page is a box with a colored border.

12. The method of claim 1 wherein the step of extracting information further comprises the step of extracting information when a computer user clicks in the first window by a selection device including a mouse and the information which is extracted is around the point of the mouse click.

13. The method of claim 1 wherein the step of extracting information further comprises the step of selecting a bookmark and retrieving information associated with the bookmark.

14. The method of claim 1 wherein the step of extracting information further comprises the step of retrieving information associated with a structural element when the user selects the structural element

15. The method of claim 1 wherein the information emphasized by a visual reference is termed a markup annotation and each markup annotation is associated with a structural element stored in a database of structural elements.

16. The method of claim 1 wherein the step of presenting extracted information further comprises the step of retrieving an associated structural element from a database of structural elements and displaying data from the markup annotations associated with the structural elements in the second window.

17. The method of claim 1 wherein the step of presenting extracted information further comprises the step of enlarging and reducing visual elements in the first window.

18. The method of claim 17 wherein the visual elements include graphic images, clip art, and picture objects.

19. The method of claim 1 wherein the step of presenting extracted information further comprises the step of emphasizing hyperlinks by representing the hyperlinks as hypertext.

20. The method of claim 19 wherein the hyperlinks are associated with visual elements.

21. The method of claim 1 further comprising the steps of:
selecting a symbol representing extracted information in the second window, and
displaying document elements associated with the symbol in the first window.

22. The method of claim 21 wherein the symbol includes graphical icons for tables, textual icons for tables, figures, graphs, charts, illustration graphics, photos, clip art, audio elements, audiovisual elements, and hyperlink messages.

23. The method of claim 21 wherein selecting a symbol further comprises the step of enlarging or reducing a zoom view of the extracted information in the first window.

24. The method of claim 21 wherein selecting a symbol displays the extracted information in a third window.

25. The method of claim 21 wherein selecting a symbol displays text in another enhanced interactive window.

26. The method of claim 21 wherein selecting a symbol executes a code sequence relating to the symbol.

27. The method of claim 21 wherein document elements include information comprising tables, figures, graphs, charts, illustration graphics, photos, clip art audio and audiovisual elements.

28. The method of claim 21 wherein the step of selecting includes clicking on the symbols with a mouse.

29. The method of claim 21 wherein the third window is an enhanced interactive window including a thumbnail image of a physical page, a graphic image of a physical page, text, free flowing text, icons, hyperlinks, menus, and control elements.

30. The method of claim 21 wherein the third window may be placed in various positions relative to the first and second windows, including on top of the other windows, adjacent to the other windows, and partially covering the other windows.

31. The method of claim 1 wherein the step of displaying extracted information further comprises the step of

advancing extracted information in the second window by clicking in the second window in areas not designated by symbols, icons, hyperlinks or hypertext.

32. The method of claim 1 wherein the step of displaying extracted information further comprises the step of advancing extracted information in the second window by an action including a keystroke, keystroke combinations, scroll wheels and voice commands.

33. The method of claim 32 wherein the step of advancing extracted information in the second window further comprises the step of advancing the physical page displayed in the first window.

34. The method of claim 32 wherein the step of advancing extracted information in the second window further comprises the step of advancing the visual reference to the extracted information in the physical page displayed in the first window.

35. The method of claim 1 wherein the extracted information will start at the top of the second window.

36. The method of claim 1 further comprising the step of creating a summary document from user created notes, highlights, and other user inputted information.

37. The method of claim 1 wherein the step of presenting extracted information further comprises the step of

allowing the user to add to the extracted information in the second window.

38. The method of claim 1 wherein the step of presenting extracted information further comprises the step of finding words within the second window.

39. The method of claim 1 further comprising the step of presenting a dictionary to a user to retrieve definitions for unfamiliar words.

40. The method of claim 1 further comprising the step of presenting an information database to a user to retrieve definitions for unfamiliar words.

41. The method of claim 1 further comprising the step of examining extracted information for unfamiliar words and displaying definitions for the unfamiliar words.

42. The method of claim 1 wherein the electronic information is associated with a particular computer.

43. The method of claim 1 wherein the electronic information may be shared between computer users and between computers.

44. A system for viewing electronic information comprising:

means for displaying in a first window a physical page from an electronic document, wherein the electronic document comprises representations of at least one physical

page, and a visual reference emphasizing information on the at least one physical page,

means for extracting the information emphasized by the visual reference on the at least one physical page, and

means for presenting the extracted information in a second window.

45. The system of claim 44 further comprising

means for selecting extracted information represented by symbols in the second window, and

means for displaying document elements associated with the symbols in a third window.

46. A computer system for viewing electronic information, the electronic information comprising textual and graphic data of electronic books and documents, the system comprising:

an information manager for manipulating graphic images of physical pages and annotations bounding electronic information from the physical pages,

an enhanced interactive window for displaying the electronic information, and

at least one tool for manipulating the electronic information in the enhanced interactive window.

47. The system of claim 46 wherein the enhanced interactive window comprises at least one window that displays extracted information from the physical pages.

48. The system of claim 46 wherein the enhanced interactive window includes a thumbnail image of a physical

page, a graphic image of a physical page, text, free flowing text, icons, hyperlinks, menus, and control elements.

49. The system of claim 46 wherein the information manager further comprises a database for storing annotations, extracted electronic information, and the relationships in the system.

50. The system of claim 46 wherein the database includes a structure tree for storing relationship information associating electronic information with extracted electronic information.

51. The system of claim 46 wherein a visual reference emphasizing the electronic information is displayed on the physical pages.

52. The system of claim 51 wherein the visual reference is a box with a colored border.

53. The system of claim 46 further comprising a dictionary to allow a user to retrieve definitions for unfamiliar words.

54. The system of claim 46 further comprising a lock which allows the electronic information to be associated with one computer.

55. The system of claim 46 further comprising a sharing mechanism which allows a computer user to share electronic information between computer users and between computers.

56. The system of claim 46 wherein the graphic images of physical pages adhere to a page description format.

57. A computer system for viewing electronic information, the system comprising:

12 a visual display for displaying an enhanced
13 interactive window based upon electronic information in a
14 page description format;

15 a storage medium for storing and retrieving
16 information related to the electronic information in the
17 page description format;

18 a computer processor coupled to the visual display and
19 to the storage medium for accessing and processing
20 information stored in the storage medium to provide a
21 display of the enhanced interactive window;

22 an input means coupled to the computer processor for
23 entering information related to the electronic information
24 in the page description format;

25 a software portion for creating a plurality of
26 relationships between the enhanced interactive window and
27 the electronic information in the page description format;
28 and

29 a software portion for providing a graphical user
30 interface for navigation and display.

58. The system of claim 57 wherein the enhanced interactive window comprises

a software portion for displaying electronic information in a page description format in a first window;

a software portion for displaying electronic information extracted from the page description format in a second window, whereby a visual reference emphasizing the extracted electronic information is displayed in the first window;

a software portion for traversing through related electronic information, whereby selection of electronic information in the first window advances the extracted electronic information displayed in the second window until the desired information is ultimately displayed; and

a software portion for traversing through related electronic information, whereby selection of extracted electronic information in the second window advances the extracted electronic information displayed in the second window until the desired information is ultimately displayed.